

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings of claims in the application:

Listing of Claims:

Claims 1-37 (cancelled).

38. (Currently amended) A device for insertion into a body lumen useful for dissolution of obstructive material, the device comprising:

a source of low-frequency mechanical motion; and

an elongate vibratory motion catheter having a proximal portion, a distal portion, and a longitudinal axis therebetween, wherein said proximal portion is matingly engageable with the source of mechanical motion,

wherein said source of mechanical motion is configured to provide low-frequency vibrational motion to the vibratory motion catheter, said low-frequency vibrational motion including rotational vibrational motion about the longitudinal axis and at least one of axial translational vibrational motion and rotational oscillatory vibrational motion.

39. (Previously presented) A device of Claim 38, wherein said elongate vibration motion catheter comprises a wire.

40. (Previously presented) A device of Claim 38 wherein said source of mechanical motion is configured to provide said low-frequency vibrational motion to said elongate vibratory motion catheter such that said vibrational motion is greater near the distal end of said elongate vibratory motion catheter than at the proximal end of said elongate vibratory motion catheter.

Claim 41 (cancelled).

42. (Currently amended) A method of dissolution of obstructive material in a body lumen of a patient comprising:

providing a source of low-frequency mechanical motion coupled to an elongate vibratory motion catheter having a proximal portion, a distal portion, and a longitudinal axis therebetween;

inserting said vibratory motion catheter into the body lumen of the patient such that said source of mechanical motion remains outside the patient's body; and

activating said source of mechanical motion such that said source of mechanical motion causes low-frequency vibration of said vibratory motion catheter along said longitudinal axis, said vibration including rotational vibrational motion about the longitudinal axis and at least one of axial translational vibrational and rotational oscillatory vibrational motion and said vibration resulting in a mixing action within said body lumen.

Claim 43 (cancelled).

44. (Previously presented) A method of Claim 42 wherein said elongate vibratory motion catheter comprises a wire.